

Two New Genera of Olive Shells (Gastropoda: Olividae)

Edward J. Petuch¹ and David P. Berschauer²

¹ Department of Geosciences, Florida Atlantic University, Boca Raton, Florida 33431

epetuch@fau.edu

² 25461 Barents Street, Laguna Hills, California 92653

shellcollection@hotmail.com

ABSTRACT Two new genera of Olividae are described, one from deep water areas of the Philippines and one from the Panamic Molluscan Province of the Eastern Pacific. The new Philippine genus, *Recourtoliva* new genus (Type Species: “*Oliva*” *poppei* Sargent and Petuch, 2008), is described as a monotypic genus, containing only the type species. The new Panamic genus, *Vullietoliva* new genus (Type Species: “*Oliva*” *splendidula* Sowerby I, 1825) contains three species: the type species, which ranges from the Gulf of California to Ecuador; “*Oliva*” *foxi* Stingley, 1984, which is endemic to Cocos Island; and “*Oliva*” *kaleontina* Duclos, 1835, which ranges from the Gulf of California to northern Peru.

KEY WORDS Olividae, *Recourtoliva*, *Vullietoliva*.

INTRODUCTION Although a number of new species and subspecies-level taxa have been described in the Family Olividae over the past two years (*i.e.* Petuch and Myers, 2014; Strano, 2016; and Thach and Berschauer, 2016), no new higher-level taxa have been introduced for the family in over four years. While preparing for an up-coming book on marine molluscan biogeography (following Petuch, 2013), within which the Olividae will play a prominent role as provincial index taxa, we noticed that two distinctive olivid groups were still in need of names. These new genera are described here.

SYSTEMATICS

Class Gastropoda
Subclass Sorbeoconcha
Order Prosobranchia
Infraorder Neogastropoda
Superfamily Volutoidea
Family Olividae
Subfamily Olivinae

Recourtoliva Petuch and Berschauer, new genus
(Figure 1A, B)

Diagnosis: Shells small for family, averaging 40 mm, heavy and thick, elongated and distinctly fusiform; spire elevated and protracted, somewhat scalariform, with thick callus bordering posterior side of filament channel; spire roughly one-third total shell length; shoulder sloping, rounded, with only slight angulation; body whorl polished but not shiny, ornamented with very numerous extremely fine longitudinal threads, corresponding to growth increments and giving shell silky appearance; wide, prominent, very shiny and polished fasciole surrounds anterior end; fasciole composed of two sections, with thickened anterior part overlapping onto wider and thinner posterior part; shell color uniform pale orange or orange-peach, with spire filament callus being white and anterior fasciole being darker orange-tan; some specimens marked with thin brown flammules around shoulder and around mid-body section of body whorl;

columella thickened, white in color, bearing 12-14 very thin, closely-packed teeth; aperture proportionally wide and flaring, pale peach-orange within interior; anterior tip of fasciole colored pale orange; fully adult specimens have large bladelike callus running along inner edge of lip; protoconch proportionally large, rounded, composed of two whorls, white in color.

Type Species: *Oliva poppei* Sargent and Petuch, 2008, from 300 m depth off Aliguay Island, Zamboanga del Norte, Philippines (Figure 1A, B). The genus is named as monotypical, with the type species being the only known species within the new genus.

Etymology: Named as a combination of "Recourt" and "Oliva", honoring Pierre Recourt of Egmond aan Zee, Netherlands, a recognized authority on the family Olividae and friend of the authors.

Discussion: With its slightly dull, silky surface texture, *Recourtoliva* more closely resembles olivids of the genera *Olivancillaria* and *Anazola* than it does classic glossy olivine olivids such as *Annulatoliva*. The new genus combines features of all of these genera, having the silky surface sheen and shiny anterior fasciole of *Olivancillaria* and *Anazola* and the apertural and columellar structures of *Annulatoliva*. This deep water monotypical genus may be the morphological bridge between the *Agaronia*-type olivids and the true olivine olivids and may represent a relictual remnant of their common ancestor.

Vullietoliva Petuch and Berschauer, new genus
(Figure 1C, D)

Diagnosis: Shells small-to-average sized for family, highly polished and glossy, cylindrical in shape, with straight sides; shoulders rounded, slightly sloping; spires proportionally low and

subpyramidal, with spire whorls partially or completely covered by thick enamel; edge of filament channel marked with evenly-spaced clumpings of large brown hairline flammules; shell color generally yellow, bright pink, golden-tan, or pale lavender overlaid with two broad bands of brown or purple-brown, one posterior of mid-body and one around anterior end; wide brown bands marked with numerous small white triangles; lighter-colored areas between brown bands marked with very numerous tiny dark brown triangular dots and paler amorphous reticulation and scattered dark brown zig-zag flammules; fasciole simple in form, singular, narrow and slightly raised; aperture proportionally narrow, widening toward anterior end; columella white in color, well-developed, ornamented with 8-10 prominent pairs of teeth on body whorl section and 5-6 large single teeth on fascicular section of columella; interior of aperture pale orange or deep yellow-orange; protoconch proportionally large, rounded, domelike, projecting, composed of 3 whorls; protoconchs varying in color from white to pink and pale purple-tan.

Type Species: *Oliva splendidula* Sowerby I, 1825, ranging all along the tropical Eastern Pacific (Panamic Molluscan Province), from the Gulf of California south to southern Ecuador and the Galapagos Islands.

Other Species in *Vullietoliva*: *Vullietoliva foxi* (Stingley, 1984), endemic to Cocos Island, Costa Rica; *Vullietoliva kaleontina* (Duclos, 1835), ranging all along the tropical Eastern Pacific, from the Gulf of California south to northern Peru. At present, only three species belong to *Vullietoliva*, all of which are restricted to the tropical Eastern Pacific.

Etymology: Named as a combination of "Vulliet" and "Oliva", honoring Thierry Vulliet of Arundel, Queensland, Australia, a passionate

admirer of the olive shells and a regional expert on the Olividae of Australia and Melanesia.

Discussion: Although superficially resembling members of the sympatric genus *Americoliva* (the *A. spicata* and *A. polpasta* species complexes of the Panamic Province; see Petuch, 2013:209-210), members of *Vullietoliva* differ consistently in having more distinctly cylindrical shells with rounded, less-angled shoulders, better-developed columellar plications which are often bifurcated and paired, and in being much more colorful shells, with vivid patterns of wide brown bands and tent markings on lavender or bright pink backgrounds. Although both *Americoliva* and *Vullietoliva* have hairline flammules bordering their filament channels, those on *Americoliva* species are proportionally longer and better-developed, with the individual clumps of flammules being better-defined and more prominent.

ACKNOWLEDGEMENTS

The authors extend their grateful appreciation to Marcus Coltro who allowed the use of his images of a specimen of *Recourtoliva poppei*

(Sargent and Petuch, 2008) in this paper. We also thank Muriel Jones of San Antonio, Texas, who collected the *Vullietoliva splendidula* (Sowerby I, 1825) figured herein while snorkeling off Venado Beach, Ft. Kobbe, Panama, and was kind enough to give it to the junior author.

REFERENCES

- Petuch, E.J. 2013.** Biogeography and Biodiversity of Western Atlantic Mollusks. CRC Press, New York and Boca Raton. 234 pp.
- Petuch, E.J. and R.F. Myers. 2014.** New Species and Subspecies of Olive Shells (Gastropoda: Olividae) from the Panamic and Indo-Pacific Regions and the Gulf of Mexico. *The Festivus* 45(3):63-74.
- Strano, G. 2016.** A Study on Olive Shells- 2: *Oliva hirasei* Kuroda and Habe, 1952 and Its New Subspecies from Pangandaran Bay, Java, Indonesia. *The Festivus* 48(1):23-31.
- Thach, N.N. and D.P. Berschauer. 2016.** *Viduoliva tricolor abbasi*, new subspecies (Gastropoda: Olividae) from Indonesia. *The Festivus* 48(3):168-171.

Editor's Note: *The Festivus* is accepting articles for future issues. Articles of a scientific nature may be submitted for the peer reviewed portion of our journal. Please refer to our Guidelines for Authors, and/or Guidelines for the Description of New Taxa in *The Festivus*, both available on our website: <http://www.sandiegoshellclub.com/festivus/> Articles are subject to a blind peer review process, and submission of an article does not guarantee acceptance or publication. We also accept articles of general interest to malacologists, conchologists and shell collectors for publication in the general interest section of our journal. All articles must be accompanied by either the author's original artwork, or a signed copyright waiver from the copyright holder.

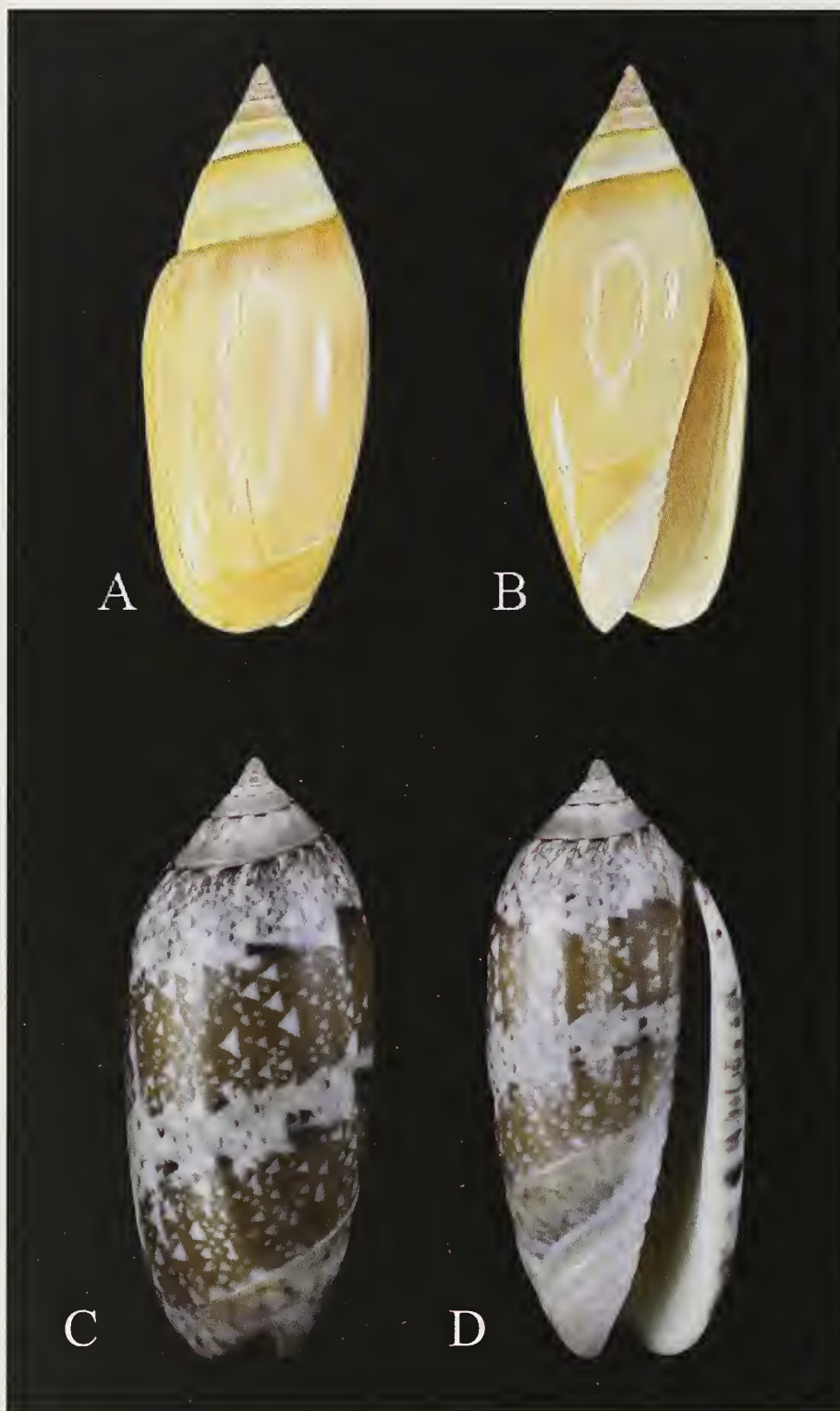


Figure 1. Type species of new olivid genera.

A, B= *Recourtoliva poppei* (Sargent and Petuch, 2008), length 40 mm, collected by fishing nets from 300 m depth off Aliguay Island, Zamboanga del Norte, Philippines. Photos courtesy of Marcus Coltro. Type species of *Recourtoliva* Petuch and Berschauer, new genus.
 C, D= *Vullietoliva splendidula* (Sowerby I, 1825), length 43 mm, collected on sandy sea floor in 2-3 m depth off Venado Beach, Ft. Kobbe, Panama, by Muriel Jones. Type species of *Vullietoliva* Petuch and Berschauer, new genus.